

**WIRE-BONDED PACKAGE WITH ELECTRICALLY INSULATING
WIRE ENCAPSULANT AND THERMALLY CONDUCTIVE
OVERMOLD**

ABSTRACT OF THE DISCLOSURE

The specification discloses an apparatus comprising a die mounted on a substrate, the die being connected to the substrate by a plurality of wires, and a mold cap encapsulating the die and the plurality of wires, the mold cap comprising an electrically insulating portion encapsulating the wires and at least a portion of the die and a thermally conductive portion overmolded on the die and the electrically insulating portion. Also disclosed is a process comprising providing a die connected to a substrate by a plurality of wires, encapsulating the wires and at least a portion of the die in an electrically insulating material, and encapsulating the die, the wires and the electrically insulating material in a thermally conductive material. Other embodiments are disclosed and claimed.